Report on MnPASS I-394 HOT Lane Project

"Get in and Go"

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Purpose of the MnPass I-394 Tour

The design and operation of the I-394 HOT lane project is very similar to the SR 167 Pilot Project.

The public perception and the technical issues Minnesota is dealing with are expected to be similar to those for the SR 167 HOT lane project.

A primary purpose of the tour was to provide participants with opportunity to talk through both the political and technical issues of I–394 project and gain insights into the potential solutions available to address these issues.

Washington State Participants

- Representative Fred Jarrett (41st District)
- Representative Jan Shabro (31st District)
- David Ward (Financial Analyst, Senate Transportation Committee)
- Gene Baxstrom (Research Analyst, House Transportation Committee)
- Jim Kelley (President and CEO, Kelley Public Affairs)
- Bob Byrd (President., Pacific Die Casting Corporation)
- Bruce Agnew (Director, Discovery Institute Cascadia Center)
- John Niles (Adjunct Fellow, Discovery Institute Cascadia Center)
- Charlie Howard, Mike Cummings and Nytasha Sowers (WSDOT)

Why MnDOT is implementing HOT Lanes

- Congestion tops list of Minneapolis Metro Area concerns, and the general purpose lanes on Interstate 394 are congested while the HOV lanes are underutilized, even during the peak period
- Rapid growth in transportation demand challenges Mn/DOT's commitment to provide efficient, timely, and reliable travel
- MnDOT "Cannot *afford* to build our way out of congestion"
- Costs of congestion are huge
  - $1 billion annual for Twin Cities
  - 93 million gallons of fuel wasted per year
  - 43 hours delay per year per driver
- Optimize use of available capacity in HOV lanes
  - Tolls provide new revenue source, self sustaining
  - Net revenues to support transit and other corridor improvements

Congestion Pricing in Minnesota: A Brief History

1994	Congestion pricing studies
1995	Citizens Jury
1996	Hwy 212 toll proposal
1997	I-394 HOV lane buy-in proposal
1999	Modeling alternatives
2000	Value pricing workshop
2001	Value Pricing Advisory Task Force Crosstown proposal
2003	I-394 /MnPASS project
2004	MnPASS system study

I-394 MnPASS Objectives

- Improve efficiency of I-394: increase person and vehicle-carrying capabilities of HOV lanes
- Maintain free flow speeds for transit and carpools
- Improve highway and transit in corridor with revenues generated
- Use electronic toll collection: tags/transponders and readers - - no toll booths
- Employ dynamic pricing and in-vehicle electronic enforcement

WSDOT Key findings

- Strong similarities between the I-394 HOT lane project and the SR 167 HOT Lane Project
- Effective enforcement strategy considered critical
- A successful project needs both “grass-roots” and “grass-tops” support
- The importance of branding the HOT lane concept
- Cost and funding for the project
- The financial return on HOT lanes

Similarities between I-394 and SR 167 HOT lanes

Comparable existing design and operations

- Two general-purpose (GP) lanes in each direction and an adjacent inside HOV lane.
- Existing facilities have peak period congestion in the general-purpose lanes.
- HOV lanes open to general purpose (GP) traffic in the off-peak periods.

SR 167 (looking north)

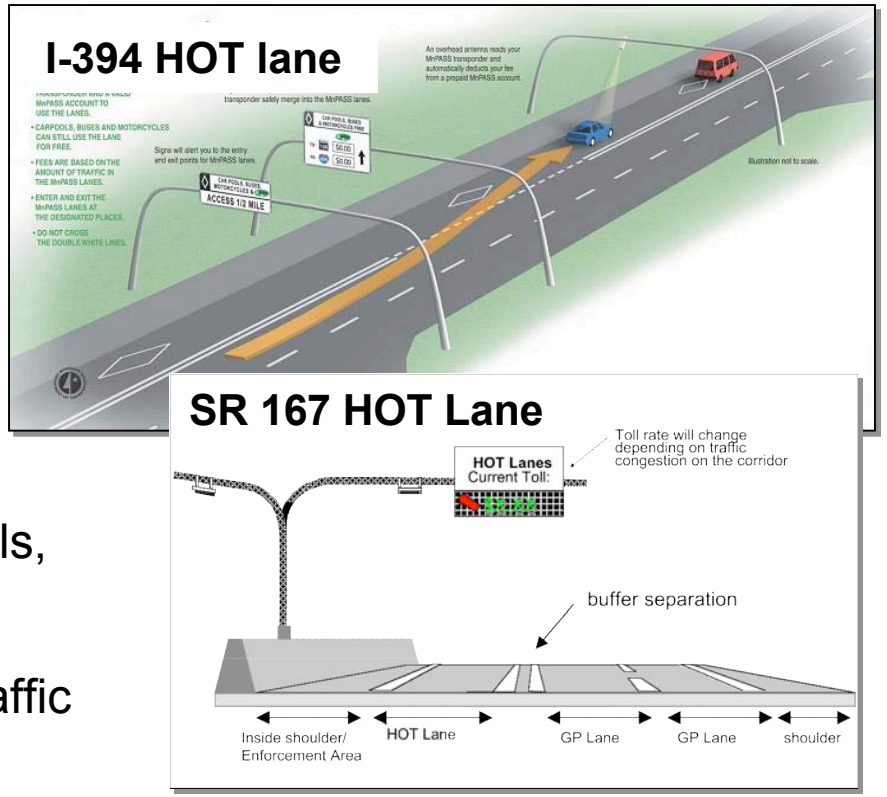
- I-394 HOV lanes: GP traffic restricted from 6:00 am to 9:00 am heading into Minneapolis (westbound) and from 3:00 p.m. to 6:00 p.m. heading out of Minneapolis to the suburbs (eastbound).

- SR 167 HOV lanes: GP traffic is restricted from 5:00 a.m. to 7:00 p.m (both northbound and southbound).

Similarities between I-394 and SR 167 HOT lanes

Comparable HOT Lane Design and Operation

- 24 hours/ 7 days a week conversion of existing HOV lanes to HOT lanes
- Double white line buffer separating the adjacent GP lanes
- Multiple mid-point access locations
- Electronic toll collection system
- Continued free access to 2-person carpools, vanpools, motorcycles, and transit
- Variable toll rate set to ensure free-flow traffic in the HOT lanes for all users



- I-394 min toll $ 0.25 w/ peak average $1 to $4 (max toll $8)
- SR 167 anticipate no min toll w/ opening peak average $1.20

Similarities between I-394 and SR 167 HOT lanes

Both the I-394 and SR 167 HOT lane projects will be evaluated one year after opening.

I-394 Evaluation

Purpose of Evaluation

- Provide the public and decision makers with info on the observed impacts of the system.
- Provide info on the public's perceptions and attitudes regarding the system.
- Provide Mn/DOT and the MnPASS team with feedback on performance of the system.
- Provide a solid foundation for any future decisions regarding potential expansion of the system.

Overall Evaluation Approach

- Two separate evaluation teams will coordinate the overall assessment:
  - System Performance Evaluation Team
  - Attitudinal Evaluation Team

SR 167 Evaluation

WSDOT to monitor and report on annual basis to Commission:

- Performance: freeway efficiency & safety; effectiveness for transit
- Ability to finance improvements and transportation services by mode
- Impacts on all highway users

WSDOT will also conduct attitudinal research on the HOT lane pilot project

MnPASS I-394 Enforcement Strategy

- Considered essential to success of I-394 HOT Lanes/ MnPASS
- Increased enforcement through partnership with state and local enforcement agencies – relying primarily on State Patrol
- Three methods:

(1) Enforcement tag

- Special transponders in police vehicles used to follow SOVs in HOT lane
- Audible tone on enforcement tag if valid transponder is read for SOV

(2) Mobile reader

- Mounted on police vehicle
- Roads Transponder on adjacent vehicles
- Includes information on the last valid reads

(3) Enforcement beacons

enforcement beacon

Importance of “grass-roots” and “grass-tops” support

- State leadership was engaged early and kept involved throughout the planning and design phases of the I-394 project.

- Several state legislators instrumental in passing the HOT lane legislation participated in a Citizen Advisory Committee that provided oversight for the Project.

Minority Report from Advisory Committee

- A major point of conflict on committee was charging a toll ($0.25) in the off-peak hours when the lane was previously open to all users.
- Charging a toll considered a “take-away” and opposed by one of the state legislators on the committee.

The importance of branding the pricing program

- MnDOT recommended creating an identity for pricing program
- Using terminology that appeals to customer experience (using terms such as “fast”, “express”, “pass”) as opposed to operator terminology such as “toll lanes”, “managed” lanes, or “HOT lanes”
- MnDOT has branded its planned system of toll lanes as “MnPASS” and has branded new toll lanes within MnPASS program as “FAST” lanes

I-394 HOT Lane Cost and Financing

I-394 HOT lane project will be developed and completed through a public/private partnership.

Capital Costs	**$10,682,800**
O, M &W - 1st Year	**$1,800,000**
Enforcement	**$200,000**
Evaluation	**$300,000**
Total	**$12,982,800**

Partner Contribution	**$2,682,800**
Mn/DOT Contribution	**$10,300,000**

Revenue and Financial Return on Investment

- Preliminary revenue estimates
  - Initial annual gross revenues $2.0M - $2.5M
  - At maturity, annual revenues $3.0M - $3.5M
- Project is expected to recover it's operating and maintenance costs
- 50% of net revenue to go to transit improvements in the corridor
- Project is expected to produce enough net revenue to amortize the construction costs in approximately 8 to 10 year - if so desired
- Project will not raise enough money to pay for any system improvements.

Minnesota is looking beyond the I-394 HOT lanes

- MnDOT is evaluating the construction of a network of new congestion priced toll lanes, called “FAST Lanes”, on their existing freeway system.
- System approaches under consideration include beltway and/or radial roadway improvements to and around Minneapolis.
- Evaluation will include analysis of transit system service improvements including bus rapid transit (BRT) operating in the tolled lanes.
- At this point, MnDOT does not expect these lanes to completely pay for themselves, thereby requiring additional funding.

WSDOT Next Steps

- Confirm scope of FHWA grant
- Tolling authority and funding (2005 Legislature)

Proposed Scope of FHWA Grant

- Preliminary Engineering
  - Channelization Plan
  - Operational concept for overall tolling system
- Outreach & Public Opinion Research
- NEPA Analysis

SR 167 HOT Lanes Legislation

- Tolling authority (4-year pilot project)
- Performance standards
- Dynamic tolling
- May vary toll for “green cars”
- Annual report
- Use of toll revenues
- Privacy